

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 000004022PCT	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/JP2004/011216	International filing date (day/month/year) 29/07/2004	(Earliest) Priority Date (day/month/year) 31/07/2003
Applicant KAO CORPORATION		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 7 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (See Box II).

3. ☒ Unity of invention is lacking (see Box III).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the drawings,

- a. the figure of the drawings to be published with the abstract is Figure No. _____

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☒ none of the figures is to be published with the abstract.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/011216

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

The powder composition for paper manufacturing of the invention contains a hydrophobic organic compound (A), an emulsifying and dispersing agent (B), and optionally water-soluble saccharides (C) and has an average particle diameter of 0,1 to 2,000 μm . Other inventions are a bulking agent for paper comprising an ester of a polyhydric alcohol and a fatty acid, and a particle for paper manufacturing comprising oil droplets enclosed in a water-soluble solid matrix.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP2004/011216

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-5, 19

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-5,19

A powder composition for paper manufacturing; a method of producing a pulp sheet; use of the powder composition

2. claims: 6-10

A bulking agent for paper; a method of producing a bulk sheet

3. claims: 11-18

A paper manufacturing chemical agent particle; a method of producing a paper manufacturing chemical agent particle

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP2004/011216

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 D21H17/72 D21H17/14 D21H21/14 D21H21/22 B01D1/18

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 D21H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
1 X	GB 1 221 952 A (RANSBURG ELECTRO-COATING CORP) 10 February 1971 (1971-02-10) page 1, line 11 - page 3, line 26; figures 1,2; example 6	1,19
1 X	US 2 341 302 A (WILSON ERNEST S) 8 February 1944 (1944-02-08) page 1, column 2, line 25 - line 49; claims 1,2	1,5,19
1 X	US 2 401 090 A (MASHBURN ROBERT T) 28 May 1946 (1946-05-28) the whole document	1,2,5,19
1 X	EP 1 001 082 A (KAO CORP) 17 May 2000 (2000-05-17) the whole document, in particular paragraph 0017	1,3-5,19
	-/-	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"8" document member of the same patent family

Date of the actual completion of the international search

29 October 2004

Date of mailing of the international search report

14. 01. 2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Nestby, K

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP2004/011216

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
1 X	EP 1 016 755 A (KAO CORP) 5 July 2000 (2000-07-05) the whole document, in particular paragraph 0028 -----	1,5,19
1 A	WO 98/33980 A (AKZO NOBEL NV ; FROELICH STEN (SE); LINDGREN ERIK (SE); SIKKAR REIN (S) 6 August 1998 (1998-08-06) page 8, line 12 - page 9, line 17; claim 17; example 3 -----	1,5,19
2		

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2004/011216

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
GB 1221952	A	10-02-1971	CH 476159 A	31-07-1969
			DE 1611788 A1	03-06-1971
			FI 51607 B	01-11-1976
			FR 1550035 A	13-12-1968
			JP 51025502 B	31-07-1976
			NO 131304 B	27-01-1975
			SE 330827 B	30-11-1970

US 2341302	A	08-02-1944	NONE	

US 2401090	A	28-05-1946	NONE	

EP 1001082	A	17-05-2000	JP 2971447 B2	08-11-1999
			JP 11350380 A	21-12-1999
			CA 2298683 A1	09-12-1999
			DE 69910716 D1	02-10-2003
			DE 69910716 T2	17-06-2004
			EP 1001082 A1	17-05-2000
			US 6599392 B1	29-07-2003
			DE 69917687 D1	01-07-2004
			EP 1247898 A1	09-10-2002
			ES 2207222 T3	16-05-2004
			WO 9963156 A1	09-12-1999

EP 1016755	A	05-07-2000	JP 3283246 B2	20-05-2002
			JP 2001055686 A	27-02-2001
			CA 2293198 A1	28-06-2000
			EP 1016755 A2	05-07-2000
			ID 25442 A	05-10-2000
			JP 3283248 B2	20-05-2002
			JP 2001081687 A	27-03-2001

WO 9833980	A	06-08-1998	AT 225435 T	15-10-2002
			AU 729702 B2	08-02-2001
			AU 6010198 A	25-08-1998
			BR 9807049 A	28-03-2000
			CA 2280094 A1	06-08-1998
			CN 1117191 B	06-08-2003
			DE 69808435 D1	07-11-2002
			DE 69808435 T2	10-07-2003
			DK 961855 T3	20-01-2003
			EP 0961855 A1	08-12-1999
			ES 2183325 T3	16-03-2003
			ID 25962 A	16-11-2000
			JP 3400803 B2	28-04-2003
			JP 2000509430 T	25-07-2000
			NO 993742 A	29-09-1999
			NZ 336786 A	23-02-2001
			PT 961855 T	31-01-2003
			RU 2168579 C2	10-06-2001
			WO 9833980 A1	06-08-1998
			SK 102599 A3	14-08-2000
			US 6165259 A	26-12-2000
